

MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

I14063 (SQ)

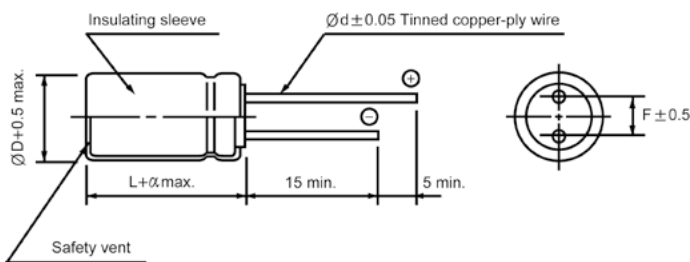
Low Impedance, High Ripple Current Series

- For LED Lighting
- High reliability withstanding 10000 hours load life at 105°C
- Complied to the RoHS directive

Items	Performance characteristics																					
Operating temperature range	-40 ~ +105°C																					
Leakage current max.	I=0.01CV or 3μA whichever is greater (after 2 minutes)																					
Capacitance tolerance	±20% at 120Hz, 20°C																					
Dissipation factor max. (at 120Hz, 20°C)	Capacitance > 1000μF: tanδ increases by 0.02 for each 1000μF from below value.																					
	<table border="1"> <tr> <td>WV</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>80</td> <td>100</td> <td>120</td> </tr> <tr> <td>Tanδ</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td>0.08</td> <td>0.08</td> <td>0.08</td> </tr> </table>	WV	6.3	10	16	25	35	50	63	80	100	120	Tanδ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.08
WV	6.3	10	16	25	35	50	63	80	100	120												
Tanδ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.08	0.08												
Low temperature characteristics (Impedance ratio at 120Hz)	Z-25°C / Z+20°C	2																				
	Z-40°C / Z+20°C	3																				
Load life (after application of the rated voltage for 10000 hours at 105°C)	WV	6.3 ~ 10	16 ~ 120																			
	Leakage current	Less than specified value																				
	Capacitance change	Within ±30% of initial value	Within ±25% of initial value																			
	Tanδ	Less than 200% of specified value																				
	ΦD	WV	6.3	10 ~ 50	63 ~ 120																	
		Φ5 ~ Φ6.3	6000	7000	6000																	
		Φ8×11.5	8000	9000	8000																	
		Φ8×16 ~ 20	9000	10000	9000																	
		Φ10×12.5	9000																			
		Φ10×16 ~ 25 Φ12.5 ~	10000																			
Shelf life (at 105°C)	After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value.																					

● DRAWING

Unit : mm



ΦD	5	6.3	8	10	12.5	16	18
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
Φd	0.5		0.6		0.8		
α	1.5			2.0			

● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

Frequency μF	120Hz	1kHz	10kHz	50kHz	100kHz≤
~ 33	0.42	0.70	0.90	0.95	1.00
47 ~ 270	0.50	0.73	0.92	0.96	1.00
330 ~ 680	0.55	0.77	0.94	0.97	1.00
820 ~ 1800	0.60	0.80	0.96	0.98	1.00
2200 ~	0.70	0.85	0.98	0.99	1.00

MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

I14063 (SQ) Series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV μF	6.3			10			16			25			35											
100										5×11	0.40	450	6.3×11	0.17	700									
120							5×11	0.40	450															
150				5×11	0.40	450				6.3×11	0.17	700												
180													8×11.5	0.075	1200									
220	5×11	0.40	345										8×16	0.065	1600									
270													10×12.5	0.053	1700									
330				6.3×11	0.17	700				8×11.5	0.090	1200	8×20	0.041	1960									
390										8×16	0.065	1600	10×16	0.038	2000									
470	6.3×11	0.17	540							10×12.5	0.053	1700	10×16	0.038	2100									
560				8×11.5	0.110	1200	8×16	0.059	1600	8×20	0.041	1960	10×20	0.030	2500									
680				8×16	0.059	1600	10×12.5	0.053	1700	10×16	0.039	2000	10×25	0.027	2600									
820	8×11.5	0.075	945	10×12.5	0.053	1700	8×20	0.041	1960				12.5×20	0.025	2900									
1000	8×16	0.059	1250	10×16	0.041	1960	10×16	0.036	2000	10×20	0.030	2500	12.5×20	0.025	2900									
1200	10×12.5	0.053	1500	10×16	0.036	2000				10×25	0.028	2900	12.5×25	0.022	3200									
1500	8×20	0.041	1500				10×20	0.027	2500	12.5×20	0.026	2900	12.5×30 16×20	0.018 0.021	3660 3330									
1800	10×16	0.036	1760	10×20	0.027	2500	10×25	0.024	2600	12.5×25	0.024	3200	12.5×35.5 16×25	0.016 0.017	4120 3810									
2200				10×25	0.027	2600	12.5×20	0.023	2900	12.5×30 16×20	0.017 0.020	3660 3330												
2700	10×20	0.027	1960	10×25	0.024	2900	12.5×25	0.018	3200	12.5×35.5	0.015	4120												
3300	10×25	0.023	2250	12.5×25	0.018	3200	12.5×30 16×20	0.017 0.020	3660 3300	16×25	0.016	3810												
3900	12.5×20	0.024	2480				12.5×35.5	0.015	4120															
4700	12.5×25	0.018	2900	12.5×30 16×25	0.018 0.016	3660 3300	16×25	0.016	3810															
5600	12.5×30	0.017	3450	16×25	0.016	3810	← Ripple current (mA rms) at 105°C , 100kHz																	
6800	12.5×35.5 16×20	0.015 0.020	3570 3250	↑ Impedance (Ω) max. at 20°C , 100kHz																				
8200	16×25	0.016	3630	↑ Case size ΦD×L(mm)																				